

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4 (canceled).

Claim 5 (currently amended): A method for storing sets of signals in a compressed format in at least one memory device from sets of signals in an uncompressed format, comprising ~~the steps of~~:

storing one or more uncompressed format sets of signals in a memory device;
compressing each uncompressed format set of signals; and
storing each compressed format set of signals in the memory device or in another memory device.

Claim 6 (currently amended): The method of claim 5 comprising ~~the step of~~ making available for future storage memory space in the memory device in which a set of uncompressed format signals is stored after that set of signals has been compressed.

Claim 7 (currently amended): The method of claim 5 comprising ~~the step of~~ retrieving each uncompressed format set of signals from the memory device for compression after at least a substantial part of the respective set has been stored therein.

Claim 8 (currently amended): The method of claim 5 wherein ~~the steps of~~ storing uncompressed format sets of signals and the storing each compressed format set of signals comprise storing the respective sets of signals in different parts of the same memory device.

Claim 9 (currently amended): The method of claim 8 wherein ~~the steps of~~ storing uncompressed format sets of signals and the storing each compressed format set of signals comprise storing the respective sets in a computer readable disc.

Claim 10 (currently amended): The method of claim 5 wherein the ~~steps of~~ storing uncompressed format sets of signals and the storing each compressed format set of signals comprise storing the respective sets in different memory devices.

Claim 11 (currently amended): The method of claim 5 wherein the ~~step of~~ storing uncompressed format sets of signals comprises storing each uncompressed format set in a computer readable electronic memory, and the ~~step of~~ storing each compressed format set of signals comprises storing each compressed format set of signals in a computer readable hard disc.

Claim 12 (currently amended): The method of claim 5 wherein the ~~step of~~ storing uncompressed format sets of signals comprises storing one or more uncompressed format sets of digital signals, and wherein the compressing ~~step~~ comprises compressing according to MP3 format.

Claim 13 (currently amended): The method of claim 12 wherein the ~~steps of~~ storing sets of signals and the compressing each set of stored signals comprise storing and compressing sets of signals representing audio.

Claim 14 (currently amended): The method of claim 5 wherein the ~~steps of~~ storing sets of signals and the compressing each set of stored signals comprise storing and compressing sets of signals representing segments of audio.

Claim 15 (currently amended): The method of claim 6 wherein the ~~step of~~ storing uncompressed format sets of signals comprises storing more than one set of uncompressed format signals in the memory device, and wherein the ~~step of~~ compressing each set of signals comprises retrieving one set of signals at a time and compressing one set of signals at a time.

Claim 16 (currently amended): The method of claim 5 wherein the ~~steps of~~ storing uncompressed format sets of signals and the storing each compressed format set of signals

comprise storing the respective sets of signals in different parts of the same memory device, and comprising ~~the step of~~ making available for future storage memory space in the memory device in which a set of uncompressed format signals is stored after that set of signals has been compressed.

Claim 17 (currently amended): A method for storing sets of digital signals in a compressed format in a computer readable disc storage device, each set representing a segment of audio, comprising ~~the steps of~~:

- storing one or more sets of signals in an uncompressed format in the storage device;
- retrieving an uncompressed format set of signals from the storage device;
- compressing the retrieved uncompressed format set of digital signals;
- storing the compressed format set of signals in the storage device; and
- making available for future storage space in the storage device in which the set of uncompressed format signals is stored after that set of signals has been compressed.

Claim 18 (currently amended): The method of claim 17 wherein ~~the step of~~ retrieving each uncompressed format set of signals from the memory device for compression comprises retrieving the set after a part of the set has been stored in the storage device.

Claim 19 (currently amended): The method of claim 17 wherein the compressing ~~step~~ comprises compressing according to MP3 format.

Claim 20 (currently amended): The method of claim 17 wherein ~~the step of~~ storing uncompressed format sets of signals comprises storing more than one set of uncompressed format signals in the storage device, and wherein ~~the steps of~~ retrieving each uncompressed format set of signals and the compressing each set of retrieved signals comprises retrieving one set of signals at a time and compressing one set of signals at a time.

Claim 21 (currently amended): The method of claim 17 wherein the compressing ~~step~~ comprises compressing sets of digital signals according to MP3 format.

Claim 22 (currently amended): A method for storing sets of digital signals in a compressed format in at least one memory device, each set of compressed format digital signals representing an audio segment, and for later retrieving a set of the stored compressed format digital signals for converting the set of compressed format digital signals into a set of uncompressed format signals suitable to be played to sound the respective audio segment, the method comprising ~~the steps of~~:

storing one or more uncompressed format sets of signals in the storage device;

compressing an uncompressed format set of stored digital signals;

storing the compressed format set of signals in the storage device;

wherein the compressing ~~step~~ and the decompressing ~~step~~ are performed according to a predetermined priority and not at the same time.

Claim 23 (currently amended): The method of claim 22 wherein the predetermined priority comprises only performing the compressing ~~step~~ when there is no pending request to perform the decompressing ~~step~~.

Claim 24 (currently amended): The method of claim 22 comprising ~~the step of~~ retrieving respective uncompressed format sets of stored digital signals only after the respective entire uncompressed format set has been stored in the storage device, and wherein the compressing ~~step~~ comprises compressing the retrieved uncompressed format set of digital signals.

Claim 25 (currently amended): The method of claim 24 wherein the ~~step of~~ retrieving each uncompressed format set of signals from the memory device for compression comprises retrieving the uncompressed format set after a part of the set has been stored in the storage device.

Claim 26 (currently amended): The method of claim 22 wherein the compressing ~~step~~ comprises compressing according to MP3 format.

Claim 27 (currently amended): The method of claim 24 wherein the ~~step of~~ storing uncompressed format sets of signals comprises storing more than one uncompressed format set of signals in the storage device, and wherein the ~~steps of~~ retrieving each uncompressed format set of signals and the compressing each uncompressed format set of retrieved signals comprises retrieving one uncompressed format set of signals at a time and compressing one uncompressed format set of signals at a time.

Claim 28 (original): A system for receiving sets of signals in an uncompressed format, converting the uncompressed format sets to sets of digital signals in a compressed format, and storing the compressed sets of signals in at least one memory device, each respective uncompressed and compressed format set of signals representing a respective audio segment, comprising:

- one or more memory devices;

- a processor coupled to the memory, the processor being programmed to:

- store in the memory device an uncompressed format a set of signals input to the processor,

- retrieve an uncompressed format set of signals after at least a substantial part of the set is stored in the memory device,

- convert the retrieved uncompressed format set of signals to a compressed format set of signals,

- store the compressed format set of signals in the memory device or in another memory device, and

- make available for future storage memory space in the memory device in which the uncompressed format set of signals are stored after that set has been converted to the uncompressed format.

Claim 29 (original): The system of claim 28 wherein the processor is programmed to retrieve a compressed format set of signals stored in the memory device, and convert the retrieved compressed format set of signals to an uncompressed format suitable to be played to sound the corresponding audio segment.

Claim 30 (original): The system of claim 29 wherein the programming assigns a priority to converting an uncompressed format set of signals to a converted format and converting a compressed format set of signals to an uncompressed format suitable to be played to sound the corresponding audio segment.

Claim 31 (original): The system of claim 30 wherein the programming provides priority to converting a compressed format set of signals to an uncompressed format set of signals.

Claim 32 (original): The system of claim 28 wherein the process comprises a programmed digital signal processor.

Claim 33 (original): The system of claim 28 wherein the process comprises a programmed digital signal processor and a programmed controller.

Claim 34 (original): The system of claim 28 wherein the memory device comprises a computer readable disk, and wherein the programming causes both uncompressed format and compressed format sets of signals to be stored on the disk.

Claim 35 (currently amended): A method for dynamically allocating memory space on a computer readable and writable disk, comprising ~~the steps of~~:

allocating a first space on the disk for storing sets of signals input to the disk in an uncompressed format;

allocating a second space on the disk for storing sets of signals in a compressed format converted from respective uncompressed format sets of signals stored in the first space; and

erasing memory space in the first space in which the uncompressed set of signals is stored that was converted to the compressed format and stored in the second space.

Claim 36 (currently amended): The method of claim 35 comprising ~~the step of~~ allocating a third space in the disk for each uncompressed format set of signals stored in the first space, the

third space being allocated for use in converting the respective uncompressed format set to a compressed format set.

Claim 37 (currently amended): The method of claim 35 comprising ~~the step of~~ providing a buffer space between the first and second spaces.

Claim 38 (currently amended): The method of claim 35 comprising ~~the step of~~ providing a buffer space at least between the first and third spaces.

Claim 39 (original): A computer readable and writable disk structured as follows:

- a first space on the disk allocated for storing sets of signals input to the disk in an uncompressed format;

- a second space allocated on the disk for storing sets of signals in a compressed format converted from respective uncompressed format sets of signals stored in the first space; and

- a third space allocated on the disk for operations in converting an uncompressed format set of signals to a compressed format set of signals.

Claim 40 (original): The computer readable and writable disk of claim 39 comprising a buffer positioned between the first and third spaces.

Claims 41-47 (canceled).

Claim 48 (currently amended): A searchable database for storing information relating to audio, video or multimedia segments, comprising:

- a plurality of segment records each storing information relating to a segment; and
- a plurality of category records each having a bit size at least equal to the number of segment records and indicating in each bit location whether the corresponding segment falls within the category, the bit locations in each category record being mapped to the segment records.

Claim 49 (original): The database of claim 48 wherein the database is stored on a computer hard disk, on which is stored each audio, video or multimedia segment.

Claim 50 (original): The database of claim 49 wherein each segment record includes the location at which the segment is stored.

Claim 51 (original): The database of claim 48 wherein each segment record includes a title for the segment.

Claim 52 (original): The database of claim 48 wherein each audio segment record includes the name of an artist or group rendering the audio represented by the respective audio segment record.

Claim 53 (original): The database of claim 49 wherein each record has a 4096 bit capacity.

Claim 54 (currently amended): A method for storing information relating to audio, video or multimedia segments in a searchable database, comprising ~~the steps of~~:

storing in a respective segment record information relating to a plurality of segments;
storing in a plurality of category records, each having a bit size at least equal to the number of segment records, information indicating whether a segment falls within the category;
and mapping segment information in the category records to the segment records.

Claim 55 (original): The method of claim 54 wherein each category record includes a single bit location for each segment record.

Claims 56-58 (canceled).

Claim 59 (currently amended): A method for providing a database of substantially unique identifications for a sets of digital signals representing respective audio segments, comprising ~~the steps of~~:

selecting a plurality of consecutive bytes of each set starting at a predetermined byte number for each respective set;
encoding the plurality of bytes selected from each set; and
storing the encoded bytes for each set in a searchable database.

Claim 60 (currently amended): A method of identifying an unknown set of digital signals representing an audio segment using the database of claim 59 comprising ~~the steps of~~:

electing the plurality of consecutive bytes of the unknown set starting at the predetermined byte number;
encoding the plurality of bytes selected from the set; and
searching the database for as match.

Claim 61 (new): A method of fast archiving of audio signals in a memory device under control of a processor, comprising:

storing a set of audio signals representing an audio segment in the memory device without conversion to a compressed format; and

when the processor is not controlling accessing an audio segment stored in the memory device, retrieving a set of audio signals that were not compressed, converting the retrieved set to a compressed format set and storing the compressed format set in the memory device.

Claim 62 (new): The method of claim 61 wherein converting the uncompressed set of audio signals comprises converting at a rate in the general range of from one to two times real time.

Claim 63 (new): The method of claim 62 wherein converting comprises converting using a digital signal processor.

Claim 64 (new): The method of claim 61 comprising erasing an uncompressed format set of audio signals from the memory device after that set has been converted to the compressed format and stored in the memory device.